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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

APR - 2 1996

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of

Revision of Part 22 and Part 90 of the  
Commission's Rules to Facilitate Future  
Development of Paging Systems

WT Docket No. 96-18

Implementation of Section 309(j) of the  
Communications Act -- Competitive Bidding

PP Docket No. 93-253

**REPLY COMMENTS OF MOTOROLA, INC.**

Motorola, Inc. hereby submits its reply comments concerning the Commission's Notice of Proposed Rule Making in the above-captioned docket.<sup>1</sup> Motorola does not believe that the public interest would be served by adopting geographic licensing or competitive bidding for the Part 90 shared channels. In addition, Motorola urges the Commission to act promptly to resolve the outstanding issues involving the freeze imposed on the filing of paging applications, and to lift the freeze on all shared channel applications and to permit limited modifications to 931 MHz and 929 MHz exclusive frequency authorizations, as detailed below.

Motorola, a leading provider of wireless communications semiconductors and advanced radio systems and services, is the largest manufacturer of paging products in the world. At the forefront of paging since its early development in the 1950's, Motorola introduced the first 900 MHz pagers, the first acknowledge pagers, and is now customer testing digitized voice pagers which will be introduced into the marketplace later this year.

Motorola knows first hand that the paging industry is one of the most vibrant, competitive and innovative of the wireless industries. Start up operations, often by small business

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<sup>1</sup> FCC 96-52 (Feb. 9, 1996) ("Notice"). Opening comments on the Commission's proposals for geographic licensing and competitive bidding for Part 22 and Part 90 authorizations were filed on March 18, 1996.

entrepreneurs, have continually delivered new services and new competition to the market. Innovations and improved service to the end-customer occurred continuously even while the price of service has declined on a steady experience-curve basis.<sup>2</sup>

The FCC's role in the development of the paging has been critical to the industry's success. Rather than stifling innovation with regulations, the FCC has fostered and encouraged technical development, as well as a competitive market place. Given the robustness of the industry, Motorola has concerns that certain actions proposed in this NPRM may not best serve the public interest and offers its reply comments in this spirit.

#### **I. The Commission Should Not Adopt Geographic Licensing or Competitive Bidding for the Shared Channels.**

The Commission requested comment on whether it should adopt geographic licensing for the lower band shared channels under Part 90.<sup>3</sup> The opening comments in this proceeding reflect strong opposition to this recommendation.<sup>4</sup> Motorola concurs with those parties who oppose adoption of geographic licensing for the shared channels.

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<sup>2</sup> The paging industry has continually improved its use of the spectrum. In the early days of signaling, a tone-only pager utilized discrete tones and took seconds to address. Today, the industry is converting to 6400 baud and the same channel can now handle 250,000 numeric users, thus making paging the most effective of all of the CMRS allocations from a user/megahertz metric. The amount of information transmitted to a user has similarly increased. Information sent to a pager started with voice, but moved to tone-only for better channel utilization. In the early 1980's, as indicated above, the market began to move to numeric paging which greatly enhanced the value to the end-user and the market began to grow exponentially. Today, with faster coding systems available, we see trends towards greater information content via a renewed interest in alphanumeric paging, as well as a re-introduction of voice in a new spectrally efficient digitally compressed format.

<sup>3</sup>*Notice*, ¶¶ 31-32. The *Notice* specifically notes the lower band shared channels under Part 90, but does not mention the shared channels at 929 MHz. It is unclear from the *Notice* if the Commission is treating the 929 MHz shared channels under its proposals for the 929 Mhz exclusive frequencies or the Part 90 shared frequencies. In either case, Motorola's opposition to implementing geographic licensing at this time for the shared channels includes both the lower band as well as the 929 MHz channels.

<sup>4</sup> See Comments of A+ Network at 15-16; Comments of Paging licenses at 2-10; Comments of the Personal communications Industry Association at 14, 17; Comments of ProNet, Inc. at 3-6.

As the comments point out, the shared channels are heavily used by both providers of paging service to the public and by private licensees that use paging frequencies in support of internal operations. Because of the heavy use of the channels, licensees must cooperate in order to ensure that paging transmissions are successfully and timely completed.

The Commission's proposal to utilize geographic licensing is not appropriate for shared channels because there are a large number of incumbents already in operation, many of the systems on these channels do not exist as providers of third party service, and because incumbent service areas vary substantially in geographic size. Forcing these incumbents into a "cookie cutter" service area will not serve well this segment of the industry and will reduce efficient use of the spectrum.

In order for the Commission even to consider adoption of any sort of reasonable geographic licensing scheme, it is necessary to address issues of frequency exclusivity;<sup>5</sup> otherwise, if frequencies must be shared, the grant of a geographic license has no real meaning.<sup>6</sup> Any proposals to adopt exclusivity policies for the current shared channels must be carefully considered in light of the heavy use of these frequencies, due to the potential for disruption to existing operations. Disruption to service is already causing extreme harm to the users of paging services (whether as a paging licensee or as the subscriber to paging services provided by a third party) and inconsistent with the public interest.

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<sup>5</sup> Frequency exclusivity issues also must be addressed before the Commission could adopt competitive bidding rules for the shared channels. Specifically, since the channels are shared, there is no mutual exclusivity among applications. Without application mutual exclusivity, the Commission lacks the authority to apply competitive bidding rules to the processing and granting of shared channels authorizations.

<sup>6</sup> This situations suggests that the Commission may want to develop a standard for determining which markets are to be subject to competitive bidding and which are not. Criteria could be developed that assess when competitive bidding is the rational approach, based on balancing legitimate business operational needs with government revenue requirements.

**II. Motorola Urges The Commission To Act Quickly to Grant Relief From the Freeze Imposed on the Acceptance and Processing of Part 22 and part 90 Applications.**

The record now before the Commission is clear that prompt relief is needed from the freeze on Part 22 and Part 90 applications adopted by the *Notice*. While the Commission has permitted existing licensees an opportunity to make limited modifications, current operators of internal systems as well as providers of service to the public simply do not have adequate flexibility to accommodate their systems to internal needs or public demand, respectively. The freeze is not uniformly applied, causing considerably more harm to the small and mid-sized paging providers than to the very large and nationwide carriers who have a large footprint and can continue to fill in. The ability to provide new service to new areas is critical for the survival of the small/mid-sized carriers. Motorola accordingly recommends that the Commission take the following two steps to modify the freeze while it addresses the proposals for market area licensing and competitive bidding.

*First*, the Commission should immediately lift the freeze on the filing and processing of applications for authorizations to operate on the Part 90 shared frequencies. As noted above, the Commission currently has no authority to auction authorizations in these bands. Before such rules can be adopted, the Commission must first consider the appropriateness of granting some form of operational exclusivity and issuing authorizations based on geographic areas. These considerations will raise significant public policy matters, and it may not be possible to resolve these issues in a timely manner.

In the mean time, the Commission has largely frozen in place the systems of a number of small carriers, as well as the internal paging networks of a large number of private licensees. The carriers, many with small coverage areas and long range plans for the build out of their systems based on the commission's transmitter-by-transmitter licensing rules, are severely hindered in their

ability to meet new customer demand and to implement long-established business plans. The carriers will suffer direct financial harm and loss; more importantly, their customers will be deprived of system enhancements and possibly will suffer service degradation.

Similarly, operators of internal paging systems may not be able to enlarge or adjust their systems to take into account corporate needs. In other cases, private paging systems play a critical role in hospital and medical communications; while under the freeze, hospitals and other critical emergency and safety service providers are not able to make system changes or, in some instances, license new, much needed paging systems. There appears to be no reason for the Commission to continue to freeze applications for shared channels; in contrast, there are significant harms resulting from the continued application of the freeze.

*Second*, the Commission, at a minimum, should partially lift the freeze on the filing and processing of applications for modifications to existing 929 MHz and 931 MHz exclusive frequency systems. Specifically, should any freeze continue, the Commission should permit such licensees to undertake limited expansion of their systems until action in this proceeding can be completed. The freeze, as it is now, actually discourages the use of new efficient, higher speed coding protocols, such as FLEX, which require in some coverage conditions, additional transmitters to maintain the same general service. Often, the additional transmitters are needed on the periphery of the incumbent's existing service contours.

The Commission should tie this permitted expansion to the existing composite interference contours. One possible measurement might be to permit the addition of facilities that extend the interference contour by up to 20 miles beyond that authorized by the Commission as of the date of adoption of the *Notice*. This would permit licensees to make needed changes in their facilities to respond to customer demand, while striking a reasonable balance with the Commission's enunciated desire to preserve the area available for auction in these frequencies.

### **III. The Commission Should Proceed Cautiously in Proposing Geographic Licensing for Paging.**

Motorola concurs with the Commission that, in some instances, geographical licensing will prove beneficial to the paging industry, particularly some licensees on 900 MHz channels. For example, existing operators of very large paging systems will benefit by streamlining their ability to build additional sites. Also, the FCC will benefit by reduced licensing workload.

Motorola is concerned, however, that a broadly sweeping reregulation of all 900 MHz paging channels will harm smaller paging operators. Motorola reminds the FCC that not all operators are driven to building wide area systems simply because a great number of customers do not require wide area service. The Commission recognized this fact in its service rules for Narrowband PCS, (47 C.F.R. 24.201) by providing channels for a variety of service areas -- nationwide, regional, MTAs and BTAs. By requiring all paging operators to tailor service to cover MTAs, the FCC would be disadvantaging smaller operators intent on serving local markets and would require such operators to compete with nationwide and regional operators. Based on the existing experience with the FCC's previous auctions, this almost guarantees the elimination of the small business operator.

#### **IV. Conclusion**

The Commission should not adopt geographic licensing or competitive bidding rules for the Part 90 shared frequencies. Moreover, the Commission should modify the freeze on application filing to permit resumption of the filing and processing of applications for the shared frequencies while at the same time allowing 900 MHz licensees to make additional modifications to their facilities during the pendency of the subject rulemaking. Motorola also urges the FCC to be mindful of the effect of its regulations on smaller paging operators that do not seek to develop MTA, regional or nationwide paging services. This can best be accomplished by allowing the Part 90 shared frequencies to remain under the existing licensing policies and by exempting the Part 22 common carrier frequencies below 900 MHz from any geographical licensing policy. In so doing, the FCC will be protecting the vitality and competitiveness of the paging industry.

Respectfully submitted,

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